## AMENDMENTS TO THE CLAIMS

**Please amend Claims 1-2, 23-25, 31, 36 and 44 as follows.**

**Please add new Claim 45 as follows.**

1. (Currently amended) A method of configurably profiling data comprising ~~the steps of~~:

receiving data from an input data stream;

pre-processing the received data by performing configurable first calculations thereon to create data relating to profiling features;

summarising the profiling features data over a length of time by performing configurable second calculations thereon to create summarised data relating to profiled features; and

post processing the profiled features data by performing configurable third calculations thereon to create a profiled output data stream for further processing.

2. (Currently amended) A method according to claim 1, wherein the pre-processing ~~stage~~ includes receiving feedback data, which is used in the first calculations to create the data relating to profiling features, wherein the post-processing ~~stage~~ creates the feedback data from the third calculations.

3. (Original) A method according to claim 1, wherein the first calculations comprise applying a linear calculation to one or more sub-streams of the data.

4. (Original) A method according to claim 3, wherein the linear calculation does not alter the data.

5. (Original) A method according to claim 1, wherein intermediate results of the first calculations are temporarily stored for use in further first calculations.

6. (Original) A method according to claim 1, wherein each profiling feature is reconfigurably flagged as changed or unchanged to indicate whether or not the input data stream has changed from a previous input.

7. (Original) A method according to claim 1, wherein the behaviours of the profiling features data are summarised over a number of non-overlapping time slots of configurable length.

8. (Original) A method according to claim 1, wherein profiling features data independent of start and end times of events are stored in a scratch pad memory.

9. (Original) A method according to claim 7, wherein the profiling feature data is stored in one of the slots that corresponds with when an event that caused the profile to be updated started or ended.

10. (Original) A method according to claim 7, wherein the profiling feature data is stored in every slot during which the event was in progress.

11. (Original) A method according to claim 7, wherein each new instance of data falling within a time slot overwrites data already in that time slot.

12. (Original) A method according to claim 7, wherein the data in the time slots is accumulated.

13. (Original) A method according to claim 7, wherein the time slots are configured to wrap, such that if an update to the profiling features goes beyond the end of the last (most recent) slot, it wraps around to the first (oldest) slot and overwrites the data and creates an event message.

14. (Original) A method according to claim 1, wherein an event message is created when the profiler receives its first input.

15. (Original) A method according to claim 14, wherein the second calculations include using event messages to trigger specified rules.

16. (Original) A method according to claim 1, wherein event messages form part of the data relating to profiled features for post-processing.

17. (Original) A method according to claim 7, wherein the data relating to profiled features comprises information in the time slots and scratch page memory.

18. (Original) A method according to claim 1, wherein the third calculations include identifying potential indicators of the event sought.

19. (Original) A method according to claim 1, wherein the third calculations include preparing the output data stream for further processing to identify indicators of the event sought.

20. (Original) A method according to claim 1, wherein intermediate results of the third calculations are temporarily stored for use in further third calculations.

21. (Original) A method according to claim 1, wherein each output data feature is reconfigurably flagged as changed or unchanged to indicate whether the profiled data stream has changed from a previous input or not.

22. (Original) A method according to claim 1, wherein the data is profiled to detect possible instances of fraud.

23. (Currently amended) A method according to claim 22, wherein the method is for use with ~~A method of~~ a fraud detection system ~~comprising the step of configurably profiling data according to claim 22~~.

24. (Currently amended) A configurable data profiling system comprising ~~at least~~:

a pre-processor arranged to receive an input data stream, the pre-processor also configured to perform configurable first calculations on the input data to create data relating to profiling features;

a profiler configured to summarise the profiling features data over a length of time according to configurable second calculations to create summarised data relating to profiled features; and

a post-processor configured to perform configurable third calculations on the profiled features data to create profiled output data for further processing.

25. (Currently amended) A system~~method~~ according to claim 24, wherein the pre-processor is arranged to receive feedback data and perform the first calculations on the input and feedback to create the data relating to profiling features, wherein the post-processor is configured to perform configurable third calculations on the profiled features data to create the feedback data and the profiled output data, wherein the system further comprises a means for providing the feedback data to the pre-processor.

26. (Original) A system according to claim 24, wherein the pre-processor is configured to apply a linear calculation to one or more sub-streams of the input and feedback data.

27. (Original) A system according to claim 24, wherein the pre-processor comprises a temporary storage for storing intermediate results of the first calculations.

28. (Original) A system according to claim 24, wherein the pre-processor comprises means for reconfigurably flagging to the profiler whether each profiling feature is as changed or unchanged.

29. (Original) A system according to claim 24, wherein the profiler comprises a memory for storing profiling features data independent of start and end times of events.

30. (Original) A system according to claim 28, wherein the profiler comprises a memory configured to store a plurality of non-overlapping time slots of configurable length.

31. (Currently amended) A system according to claim 30~~28~~, wherein the plurality of non-overlapping time slots are configured to store the summarised behaviours of the profiling features data.

32. (Original) A system according to claim 29, wherein the profiler is configured to store the summarised behaviours of the profiling features data in one of the slots that corresponds with when an event that caused the profile to be updated started or ended.

33. (Original) A system according to claim 29, wherein the profiler is configured to store the summarised behaviours of the profiling features data in every slot during which the event was in progress.

34. (Original) A system according to claim 29, wherein the profiler is configured to store the summarised behaviours of the profiling features data in a time slot by overwriting data already in that time slot.

35. (Original) A system according to claim 29, wherein the profiler is configured to store the summarised behaviours of the profiling features data in a time slot by accumulating a new instance of the data with data already in the time slot.

36. (Currently amended) A system according to claim ~~29~~30, wherein the time slots are configured to wrap, such that if an update to the profiling features goes beyond the end of the last (most recent) slot, it wraps around to the first (oldest) slot and overwrites the data and creates an event message.

37. (Original) A system according to claim 29, wherein the profiler is configured create an event message when the profiler receives its first input.

38. (Original) A system according to claim 24, wherein the second calculations include using event messages to trigger specified rules, the event messages forming part of the data relating to profiled features for post-processing.

39. (Original) A system according to claim 29, the profiler is configured to pass information in the start and end time independent memory and time slot memory to the post-processor as part of the profiled features data.

40. (Original) A system according to claim 24, wherein the post-processor is configured perform the third calculations by identifying potential indicators of the event sought.

41. (Original) A system according to claim 24, wherein the post-processor is configured perform the third calculations by preparing the output data stream for further processing to identify indicators of the event sought.

42. (Original) A system according to claim 24, wherein the post-processor comprises a temporary storage for storing intermediate results of the third calculations.

43. (Original) A system according to claim 24, wherein the post-processor comprises means for reconfigurably flagging in the output data stream whether each profiled feature is changed or unchanged.

44. (Currently amended) A system according to claim 24, wherein the system is for use with a~~A~~ fraud detection system ~~comprising a configurable data profiling system according to claim 24~~.

45. (New) A system for configurably profiling data comprising:

means for receiving data from an input data stream;

means for pre-processing the received data by performing configurable first calculations thereon to create data relating to profiling features;

means for summarising the profiling features data over a length of time by performing configurable second calculations thereon to create summarised data relating to profiled features; and

means for post processing the profiled features data by performing configurable third calculations thereon to create a profiled output data stream for further processing.